Pirate Paddleboat

Kit contains:

- Pool noodle cross section
- Craft stick, split long way
- Craft stick, split short way
- Rubber band
- Washer
- Paper clip
- Toothpick
- Pirate sticker
- Sequins

You will need: tape and glue.

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INSTRUCTIONS

Step 1. Make the paddle. Sandwich your rubber band between the two short craft stick halves. Tape the sticks together.

Step 2. Poke your skinny craft stick halves into the pool noodle as shown. Loop the paddle's rubber bands around the sticks.

Your paddleboat looks ready to zoom, but there's a problem: it's back heavy. Let's fix it!

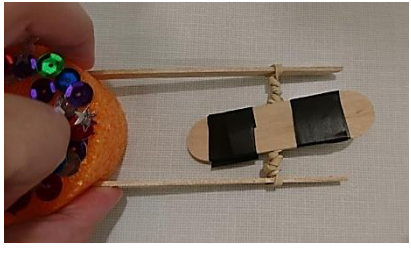
Step 3. Place the washer on the bottom of your boat. Unfold the paper clip to form a Π shape. Poke it through the pool noodle to secure the washer in place.

Step 4. Make your paddleboat fabulous. Create a pirate flag by folding the pirate sticker around the toothpick. Glue on sequins as needed.

Test your paddleboat... for SCIENCE! Wind the paddle, set the boat in water, and let go. What happens if you wind the paddle backward? What happens if you wind the paddle forward?

SCIENCE CONNECTION

When you wind up the paddle, the rubber band stores energy. This is **potential energy**, which occurs because the twisted rubber band is not in equilibrium—you have to hold it in place, or it will unwind. When you let go of the paddle, the rubber bands unwind to rotate the paddle and push the boat forward. That unwinding is the conversion of potential energy to **kinetic energy**, which is the energy of motion. The rubber band moving the paddle and the paddle pushing on the water and the boat moving forward are all examples of kinetic energy.



Source: https://www.msichicago.org/science-at-home/hands-on-science/paddle-boat/